

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (currently amended): A filter of a smoking article comprising catalytically active carbon impregnated with at least one heavy metal, and wherein the at least one heavy metal is incorporated within graphitic sheets of the catalytically active carbon.

Claim 2 (currently amended): A filter of a smoking article ~~comprising catalytically active carbon impregnated with at least one heavy metal, and~~ as in claim 1 further including sulfur or nitrogen ligation of the at least one incorporated metal contained within the active carbon.

Claim 3 (withdrawn): A method of improving the activity of carbon comprising the steps of introducing catalytically active sites to carbon by heat treatment in the presence of heavy metals and nitrogenous or sulfurous materials.

Claim 4 (withdrawn): A method as in claim 3 wherein the heat treatment is carried out in the range of 500 to 1000°C.

Claim 5 (withdrawn): A method as in claim 3 wherein the active carbon has enhanced catalytic activity for the oxidation of hydrogen sulfide, sulfur dioxide, phosphine and/or arsine.

Claim 6 (currently amended): A method of filtering smoke of a smoking article including the steps of establishing a flow of mainstream tobacco smoke, passing the

mainstream tobacco smoke through a filter comprising catalytically active carbon impregnated with at least one heavy metal, and wherein the at least one heavy metal is incorporated within graphitic sheets of the catalytically active carbon, and selectively oxidizing or absorbing selected gas phase components from the smoke.

Claim 7 (currently amended): A smoking article comprising a tobacco rod and a filter element including catalytically active carbon impregnated with at least one heavy metal, and wherein the at least one heavy metal is incorporated within graphitic sheets of the catalytically active carbon.

Claim 8 (currently amended): An activated carbon comprising catalytically active carbon impregnated with at least one heavy metal, and wherein the at least one heavy metal is incorporated within graphitic sheets of the catalytically active carbon.

Claim 9 (original): An activated carbon as in claim 8 wherein the heavy metal is selected from the group consisting of Mg, Al, Si, P, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Y, Zr, Nb, Mo, La, Ce, other lanthanides, Hf, Ta, W, Pb and Bi.

Claim 10 (original): An activated carbon as in claim 8 including catalytically active carbon produced by heat treatment of carbon in the presence of heavy metals and nitrogenous or sulfurous materials.

Claim 11 (currently amended): A method of filtering smoke of a smoking article including the steps of establishing a flow of mainstream tobacco smoke, passing the mainstream tobacco smoke through a filter comprising catalytically active carbon impregnated with at least one heavy metal, and wherein the at least one heavy metal is incorporated within graphitic sheets of the catalytically active carbon, and further including

sulfur or nitrogen ligation of the at least one incorporated metal contained within the active carbon, and selectively oxidizing or absorbing selected gas phase components from the smoke.

Claim 12 (currently amended): A smoking article comprising a tobacco rod and a filter element including catalytically active carbon impregnated with at least one heavy metal, and wherein the at least one heavy metal is incorporated within graphitic sheets of the catalytically active carbon, and further including sulfur or nitrogen ligation of the at least one incorporated meal contained within the active carbon.

Claim 13 (currently amended): An activated carbon comprising catalytically active carbon impregnated with at least one heavy metal, and wherein the at least one heavy metal is incorporated within graphitic sheets of the catalytically active carbon, and further including sulfur or nitrogen ligation of the at least one incorporated metal contained within the active carbon.

Claim 14 (previously added): An activated carbon as in claim 13 wherein the heavy metal is selected from the group consisting of Mg, Al, Si, P, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Y, Zr, Nb, Mo, La, Ce, other lanthanides, Hf, Ta, W, Pb and Bi.

Claim 15 (previously added): An activated carbon as in claim 13 including catalytically active carbon produced by heat treatment of carbon in the presence of heavy metals and nitrogenous or sulfurous materials.